

REMARKS

A petition and fee for a one-month extension to reply to the pending Office Action is being submitted concurrently herewith.

Claims 1 and 6 have been amended. Support for the amendment can be found in the Specification as filed, in particular paragraphs 13 and 14. No new matter has been added.

The rejection of claims 1-2 and 4-9 under 35 USC 103(a) as being unpatentable over Cote et al. (U.S. 5,209,231) in view of Gobell (U.S. 6,246,893) is respectfully traversed. With respect to claim 1 as amended, the Applicant respectfully asserts that neither Cote et al. nor Gobell et al. teach or suggest a sequential arrangement of an LED light source, a first polarizer, *a material sample*, a $\frac{1}{4}$ wave plate, and a second polarizer. In both references, the sample, in particular a human eye, is positioned after the second polarizer. There is no teaching or suggestion in either reference which would indicate that the sample can be placed between the first polarizer and the $\frac{1}{4}$ wave plate.¹ Thus, the Applicant respectfully asserts that the claimed invention is not obvious in view of these references.

With respect to claims 2, 4 and 9, the Applicant respectfully asserts that it would not have been obvious from either reference to modify Cote et al. with an LED having any desired wavelength. Both references teach analyzers for a specific use, i.e., measuring levels of blood glucose. Cote et al. specifies a helium-neon laser or an infrared-emitting diode for their apparatus. Col. 6, ll. 8-13. There is no teaching or suggestion that this may be changed to a green-emitting LED. In fact, Gobell makes it clear why such a modification would not be feasible. At Col. 2, lines 20-29, Gobell states that human tissue is transparent in the wavelength range from about 750 nm to about 1800 nm. They further identify other issues with *in vivo* measurements at Col. 11, lines 4-28 which confine the desired wavelengths for such measurements to the red and near-IR regions of the spectrum. It appears that for these reasons neither reference uses nor suggests using a light source that emits at wavelengths below 600 nm. Thus, the Applicant respectfully asserts that it would not have been obvious to make the substitution suggested by the Examiner.

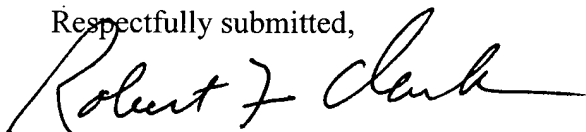
¹ The Applicants would further like to point out that any proposed modification by the Examiner cannot render the prior art unsatisfactory for its intended purpose nor change the principle of operation. See, MPEP §2143.01.

With respect to claim 6, the Applicant respectfully disagrees with the Examiner's contention that it would have been obvious to modify Cote et al. to make the $\frac{1}{4}$ wave plate (and the 2nd polarizer) movable along the central axis. There is no suggestion or teaching in either reference to make the distance between the first polarizer and the $\frac{1}{4}$ wave plate (and second polarizer) adjustable. The Examiner's reasoning that this would have been obvious in order to measure different characteristics of the sample wouldn't make sense in either case since the sample to be measured is located after the second polarizer and not between those components.

The rejection of claims 3 and 10 under 35 USC 103(a) as being unpatentable over Cote et al. in view of Gobell and Oldenbourg et al. (U.S. 6,924,893) is respectfully traversed. The Applicant respectfully reasserts the above arguments with respect to Cote et al. and Gobell. Further, the Applicant asserts that Oldenbourg does not teach using an array of LEDs to provide a uniform illumination field. The array of LEDs shown in Fig. 22 is used to form the "spatial light modulator" which by its very name implies that it is not used to provide an even field of illumination. Col. 16, line 63 to Col. 17, line 25. Moreover, there is nothing in Cote et al. nor Gobell which teaches or suggests that a even field of illumination is desirable. In both cases, the light from the light source is either already a coherent beam (laser) or formed into a coherent light beam through the use of various optical components. An array of LEDs as used by Oldenbourg would likely be detrimental to the measuring capabilities of the blood glucose analyzers described in the other references. The Applicant respectfully asserts that the Examiner's contention that such a modification would be done to make the system more accurate is entirely without basis. Thus, the Applicant respectfully asserts that the claimed invention is not obvious in view of these references.

In view of the foregoing amendment, it is believed that the Examiner's rejections have been overcome and that the application is in condition for allowance. Such action is earnestly solicited.

Respectfully submitted,



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